ECO-SPIRITUALITY, METACOGNITIVE AWARENESS AND CONSCIENTIOUSNESS AS CORRELATES OF SUBJECTIVE VITALITY OF UNDERGRADUATES

SYNOPSIS

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INTRODUCTION

In the bustling world of academia, college students often find themselves grappling with a multitude of challenges that can impact their overall well-being. Apart from the pressures of academic performance, social engagements, and personal growth that weigh upon them, it becomes crucial to explore other factors that can predict their subjective vitality. **Eco-spirituality** is a phrase that refers to the fusion of ecological awareness and spiritual practices. According to Lincoln (2000), Eco-spirituality refers to the intertwining of instinct and bodily awareness pertaining to a relational view between human beings and the planet. It recognizes the interconnectedness and interdependence of all living beings and the natural world, and emphasizes the importance of living in harmony with nature. Eco-spirituality seeks to foster a deep reverence and respect for the Earth and its ecosystems, and often involves a sense of awe, wonder, and sacredness towards the natural world. At its core, eco-spirituality recognizes that environmental issues are not solely practical or scientific concerns but also have profound spiritual dimensions. It acknowledges that the actions towards the environment are not only detrimental to the planet but also impact one's spiritual well-being as well as subjective vitality.

Eco-spirituality promotes the idea that caring for the Earth is not just an ethical responsibility but a spiritual imperative. It draws inspiration from various religious and spiritual traditions, including indigenous wisdom, deep ecology, and pantheism, among others. It encourages practices such as mindfulness, meditation, and contemplation in nature to deepen one's connection with the natural world and to develop a sense of ecological awareness and responsibility. Eco-spirituality also advocates for sustainable living practices, environmental activism, and social justice. It recognizes the intrinsic value of all life forms and supports efforts to protect and restore the Earth's ecosystems. It encourages individuals to live in harmony with nature by adopting eco-friendly habits, reducing consumption, and promoting ecological conservation and restoration. Overall, eco-spirituality offers a holistic approach to environmentalism, intertwining ecological awareness, ethical values, and spiritual practices. It seeks to foster a deeper understanding of our place within the web of life and to inspire actions that promote the well-being of both the Earth and its inhabitants.

In a phenomenological study, Lincoln (2000) evaluated the nurses' eco-spiritual consciousness defined eco-spiritual consciousness as "accessing a deep awareness of one's eco-spiritual relationship." Then

they focused on the five eco-spiritual consciousness principles, which are tending, dwelling, reverence, connectivity, and sensibility.

1. The definition of tending was given as, "being awake and conscious," along with "deep, inner self-reflection."
2. The definition of dwelling was assumed as, "a process of being with the seen and the unseen."
3. The definition of reverence was agreed as, "rediscovering the mystery present in all creation and is embodied sense of the sacred," with an emphasis on the earth.
4. The definition of connectedness was given as having an, "organic relationship with the universe."
5. The definition of sensibility is set as, "a sense of knowing."

Metacognitive awareness refers to the ability to reflect upon and be aware of one's own cognitive processes, including thinking, learning, and problem-solving. It involves being conscious of how one thinks, what strategies are used and learnt, and how one can monitor the mental processes. Metacognition allows individuals to understand their own strengths and weaknesses in learning and to make intentional decisions about how to approach new tasks or challenges. It involves being aware of one's own knowledge, understanding, and comprehension of a particular subject or concept, as well as monitoring and regulating one's own thinking processes. Metacognitive awareness is often associated with improved learning outcomes and effective problem-solving skills. Metacognitive awareness can influence an individual's self-perception, decision-making, and overall psychological well-being.

In the words of Conley (2013) metacognition is, "All learning processes and behaviours involving any degree of reflection, learning-strategy selection, and intentional mental processing that can result in a student's improved ability to learn." In order to comprehend and enhance these learning processes, metacognitive awareness entails self-reflection. This emphasis on metacognition contrasts with the prior dominance of cognitive content knowledge in educational theory, legislation and practice. Recent studies have shown that student learning and accomplishment depend on both cognitive and metacognitive skills. Metacognition is described by Hacker et al. (2009) as being composed of "two complementary processes: 1) the knowledge of cognition and 2) the regulation of cognition."

One of the very important personality traits of being careful, organized, responsible, dependable, and diligent in one's actions and behaviours is **Conscientiousness.** Conscientiousness is a word used to

describe the group of characteristics that make up this domain because it has a broad and ambiguous definition. Conscientiousness indicates a desire to complete a task well and a serious attitude toward one's social obligations. Conscientious people are typically effective and well-organized rather than being slack and disorganized. They exhibit a tendency to show self-discipline, act dutifully, and aim for achievement; displays planned rather than spontaneous behaviour, and are generally dependable. Conscientious people tend to act responsibly, with self-control, and with a drive toward success. It is expressed in behaviours like being orderly and methodical, as well as qualities like trustworthiness, attentiveness, thoroughness, and deliberateness (the propensity to deliberate before acting).

Individuals who possess a high level of conscientiousness are typically efficient in their approach to tasks and responsibilities and they tend to be disciplined and self-motivated, striving for excellence in their work and personal endeavours. Those who are high in Conscientiousness fulfil their obligations and commitments consistently. Such individuals also demonstrate a strong sense of duty and responsibility towards others and they are often caring for the needs of others, showing attentiveness and a willingness to go an extra mile being good team players, taking their roles seriously and contributing to the success of group endeavours. Moreover, conscientiousness is associated with a strong work ethic and a focus on long-term goals. Individuals high in conscientiousness are inclined to plan and prioritize effectively, displaying perseverance and self-discipline in the pursuit of their objectives. They have a tendency to be detail-oriented, thorough, and attentive to quality. On the negative side, excessive conscientiousness can lead to perfectionism and a tendency to be overly critical of oneself and others. It may also result in rigidity and inflexibility, as individuals may struggle to adapt to unexpected changes or new situations. Overall, conscientiousness reflects a set of traits and behaviours that plays an important role in various aspects of life, including work performance, academic achievement, and interpersonal relationships. According to Roberts et al. (2009), the ability to delay desire and adhere to socially defined norms for impulse control are all characteristics of conscientiousness.

Due to its presence in the Big Five classification of personality traits—Extraversion, Agreeableness, Conscientiousness, Emotional Stability, and Openness/Intellect—the term conscientiousness is well-known among researchers and widely recognized and studied in psychology. The Big Five model of personality is commonly known as the Five Factor Model or OCEAN. The NEO PI-R and NEO-IPIP

by Costa and McCrae (1981) and Goldberg (1981) are two of numerous personality tests that evaluate these characteristics. These models propose that conscientiousness is not a distinct 'kind' of person but rather a continuous characteristic of personality. The six facets of conscientiousness are competence, order, and duty, striving for achievement, self-discipline, and deliberation, according to the NEO framework.

Conscientiousness can also be found in various personality models, including Cattell's 16 PF model, Cloninger's Temperament and Character Inventory, HEXACO, where it is connected to persistence and self-direction. In Zuckerman's alternative five-model, it is negatively correlated with impulsive sensation-seeking. Various corporations regularly provide self-report integrity exams to prospective workers in order to gauge their conscientiousness. Other theories provide a more condensed set of two "aspects": orderliness and industriousness constitute an intermediate level of organization, with orderliness being more closely related to productivity and work ethic and industriousness being more closely related to the desire to keep things tidy and ordered. Along with impulsive control, high conscientiousness and other personality qualities ((Low) extraversion, (High) agreeableness, (Low) openness, and (Low) neuroticism) are related. Low conscientiousness is a behavioural trait that is linked to a person's incapacity to inspire themselves to carry out actions that they want to do.

Subjective vitality: Subjective vitality refers to an individual's subjective experience of feeling energized, alive, and engaged with life. It reflects a sense of well-being and is often associated with positive psychological outcomes such as increased motivation, resilience, and overall life satisfaction. Subjective vitality is a feeling of being alive and aware and having great level to use this energy for themselves. According to Ryan and Deci (2001), being vivacious and energetic are essential components of being completely functional and psychologically healthy. As such, vitality is regarded as a component of eudaimonic well-being.

It encompasses a sense of enthusiasm, passion, and motivation. Subjective vitality is influenced by various factors, including personal values, meaningful goals, autonomy, social connections, and a sense of purpose. When individuals align their actions and behaviours with their personal values, they often experience a greater sense of subjective vitality and overall well-being. It is associated with a sense of fulfilment and satisfaction in life, as well as higher levels of energy and enthusiasm for pursuing goals

and engaging in activities.

LITERATURE REVIEW

ECO-SPIRITUALITY

S.NO.	AUTHOR/YEAR	TITLE	RESULTS
1.	Itel (2023)	Eco-spirituality in French-Speaking Europe: Linking Ecological Thought with Alternative Spirituality	In this paper, it is postulated that modern eco-spirituality is based on the dual articulation of ecology (science) and spirituality (religion) and can be entwined with neopagan practises and beliefs, as well as an animist vision more broadly. The work discussed in this study is grounded in social anthropology, adding a significant empirical dimension that is frequently absent from discussions of eco-spirituality and the conceptual intersections of science and religion today's context.
2.	Willmore (2022)	Eco-spirituality: A Teacher's Path Toward Wholeness and Wellness	This article outlines the principles of holistic education as they are interpreted by the researcher and summarises research that highlights the importance of spiritual and ecological pedagogy as crucial elements of the holistic education landscape. Finally, this study explores eco-spirituality, the formation of spiritual and ecological identity, and proposes it as a tool for teacher wellbeing and for student and society wellness as well.
3.	Irshad, Parveen, and khan (2021)	Eco spirituality: A qualitative analysis in diverse faith	In this study an effort was made to look into the spiritual relationship between the environment and the human soul. Many world religions and the natural world are discussed in this analysis. Eco-spirituality brings together the various world religions, such as Buddhism, Islam, Jainism, Christianity, Judaism, and Hinduism, as well as the personal concern for the environment. Eco-spirituality thus aims to help individuals recognise the sacred in the natural world and their connection as humans to all of creation.
4.	Billet and Ira (2021)	Eco-spirituality: content, correlates and moral concern for nature	The idea of eco-spirituality holds that nature or human interaction with it has spiritual meaning. The researchers looked into three fundamental issues about eco-spirituality in 6 samples drawn from the US, UK, and Canada (total N = 7213): (1) what is eco-spirituality, (2) who is eco-spiritual, and (3) Is it important for the preservation of nature? To answer these questions, they created and validated a 12-item scale of eco-spirituality and used self-report measures and moral trade-off scenarios. Consideration of nature as a useful resource and eco-spirituality were adversely associated. The Eco-spirituality

			Scale was mainly uncorrelated with political inclination and other demographic factors, and its items received widespread endorsement. Eco-spirituality foresaw how humans would behave in environmentally significant sectors, with a propensity to revere nature. This inclination was manifested in a variety of ways, including giving deontological principles a higher priority in environmental decision-making, outright declining to engage in trade-offs between nature and economic gain, and voting Green Party wholeheartedly. Eco-spirituality is a new area of study in psychology that may be crucial in illuminating the reasons why certain people are prepared to make the sacrifices necessary to lead more sustainable lives.
5.	Lestar and Böhm (2020)	Eco-spirituality and sustainability transitions: agency towards degrowth	This article aims to argue for the inclusion of eco-spirituality as a worldview in the study of sustainability transitions by highlighting the significance of eco-spiritual practice. We contend that eco-spirituality is an important factor in understanding people's modern agency, which moves away from the mantras of resource efficiency and unending economic expansion and towards more radical degrowth worldviews and alternative paths to happiness and contentment in life.
6.	Suganthi (2019)	Eco-spirituality: A Scale to Measure an Individual's Reverential Respect for the Environment	Researchers have found that the spiritual aspect of a person's connection to nature has not been quantified. Items were created to evaluate eco-spirituality once the idea of eco-spirituality was defined using existing literature. A survey of 527 employees working for different organisations was done to determine the measurement scale. For the purposes of conducting exploratory and confirmatory factor analyses, the data were divided into two samples. Five dimensions of eco-spirituality—dwelling, caring, revering, experiencing, and relating—were identified through exploratory factor analysis. Structural equation modelling was used to conduct a confirmatory factor analysis in order to evaluate the reliability, convergent validity, and discriminant validity. Model fit indices were used to compare the four created models. The Connectedness to Nature Scale (CNS), the Environmental Attitude Inventory (EAI), and the Daily Spiritual Experience Scale (DSES) were three related scales utilised in a second study with 321 respondents to validate the eco-spirituality scale.

			Researchers could measure eco-spirituality and test causal correlations with the use of the eco-spirituality instrument created in this work. This would add to the body of work already written about environmental psychology.
7.	Delaney, and Barrere (2009)	Eco-spirituality: the experience of environmental meditation in patients with cardiovascular disease	This phenomenological study used a novel, spirituality-based meditation intervention that concentrated on eco-spirituality with cardiovascular disease patients in order to explore and characterise the experience of environmental meditation. The participants in the study were a convenience sample of 6 women and 2 men, ages ranging from 42 to 64 years, with a mean age of 57 years (SD = 8.33 years). 85 relevant phrases or sentences were taken from the 8 journals and the researchers' field notebooks, transformed into defined meanings, and then grouped into 4 theme clusters: entering a new time zone, finding a new rhythm, becoming a healing environment, and environmental reawakening. This phenomenological study's objective. The results of this study laid the foundation for further investigation of the spiritual aspect of person and environment and supported holistic nurses and other healthcare professionals' use of eco-spirituality meditation in the treatment of patients with cardiovascular disease.

METACOGNITIVE AWARENESS

S.NO.	AUTHOR/YEAR	TITLE	RESULTS
1.	Hassan et al. (2022)	Metacognitive awareness and its relation to students' academic achievement: Time to ponder its implication in delivery of the curriculum	Metacognition is defined as "skills that enable learners to understand and monitor their cognitive process" in the self-regulated learning hypothesis. Knowledge of cognition and management of cognition are two kinds of metacognition. Metacognitive skills are predicted to improve students' performance hence the current research advises that metacognition be taught as part of future curricula. To ascertain students' metacognitive abilities in declarative, procedural, and conditional knowledge as well as the process involved in its planning, monitoring, and evaluation, the metacognition awareness inventory (MAI) score was gathered. To conclude with the low relationship between metacognitive abilities and accomplishment levels reveals students' exaggerated perceptions of their own knowledge and cognitive

			control. This involves incorporating students' awareness of metacognition into the delivery of curriculum and their learning process.
2.	Tuonone et al. (2022)	Metacognitive awareness in relation to university students' learning profiles	In a multidisciplinary setting of higher education, the study sought to comprehend the relationship between metacognitive awareness and learning strategies utilising a person-oriented approach. 462 third-year students studying the humanities, social sciences, and theology took part in the study. The students responded to a how you learn questionnaire, which had 18 questions about metacognitive awareness and 12 questions about learning strategies. The factor structure of the instruments was investigated using exploratory and confirmatory factor analyses. K-means cluster analysis, one-way ANOVA, and Pearson's correlation were used to analyse the data. The results exposed two aspects of metacognitive awareness, namely knowledge about cognition and regulation of cognition. Regulation of cognition was rated lower than knowledge of cognition. The findings demonstrated that both dimensions of metacognitive awareness were negatively connected to an unreflective approach and statistically significantly related to a deep approach to learning and organised studying. Three learning profiles were also found, and they varied in these two areas of metacognitive awareness. More specifically, when compared to students representing disorganised students employing a deep approach or those with a discordant profile, students representing organised students applying a deep approach scored higher on understanding of cognition as well as on regulation of cognition. Additionally, students who fit the discordant profile scored statistically considerably lower on knowledge about cognition than students who fit the deep approach profile. According to the results of the study, students with various study profiles require various forms of help for developing metacognitive awareness of their own learning processes.
3.	Song, Loyal and Lond (2021)	Metacognitive awareness Scale, Domain Specific (MCAS-DS): Assessing Metacognitive awareness	This study used a unique Meta-Cognitive awareness Scale - Domain Specific (MCAS-DS) that promotes reflection on task planning processes to explore the

		During Raven's Progressive Matrices	association between metacognitive awareness and intelligence. The initial goal of developing this domain-specific scale was to assess participants' awareness of their own metacognition in relation to Raven's Progressive Matrices (SPM). A 15-item scale was created after the discriminating index and exploratory factor analysis. Five components were identified using exploratory factor analysis: awareness of self-monitoring engagement, awareness of one's own abilities, awareness of one's response time and speed, awareness of alternative solutions, and awareness of necessary resources for problem-solving. Then, Raven's Standard Progressive Matrices was used to measure the cognitive level of 98 people. Additionally, participants completed the MCAS-DS and other tasks that assessed their level of confidence and test-taking behaviour. The standardised IQ scores obtained from the SPM were positively connected with metacognitive awareness, while the SPM was negatively correlated with overconfidence as determined by the Confidence Level Measure. This study offers hope for clarifying the connection between metacognitive awareness and intelligence using the task-specific scale, despite certain limitations.
4.	Ramadhanti and Yanda (2021)	Students' Metacognitive awareness and Its Impact on Writing Skill	Metacognitive awareness is one of the elements that can influence a person's capacity to compose explanatory text. The students' level of metacognitive awareness was explained using the descriptive technique, and the correlational method was used to explain how metacognitive awareness affected the students' capacity to write explanatory texts. As many as 25 children exhibited a high level of awareness, according to the findings, while 38 others had a moderate level. A correlation value of 0.812, was found between metacognitive awareness characteristics and the capacity to compose explanatory text. 66% of the ability to compose explanatory language is influenced by metacognitive awareness, and the other 44% is impacted by other factors. This demonstrates the significance of metacognitive awareness in writing. Students must always become more conscious of their own thought processes.

			Lecturers can teach writing using a cognitive process approach to develop students' metacognitive knowledge and apply metacognitive techniques so that they have the metacognitive abilities necessary to accomplish writing tasks. This is one way to increase students' awareness of their own metacognition.
5.	Özçakmak et al. (2021)	The effect of metacognitive awareness on academic success	The purpose of this study was to look into potential influences of metacognitive awareness on academic performance. 314 aspiring teachers who were enrolled in the faculty of education made up the study's population. The study used a descriptive survey methodology. The pre-service teachers who took part in the research were found to have a high level of metacognitive awareness. The degrees of metacognitive awareness among pre-service instructors were not gender-specific. It was determined that students' degrees of metacognitive awareness were positively influenced by their academic success. Additionally, it was discovered that the pre-service teachers were able to design, monitor, and evaluate their own cognitive activities. It was also discovered that the individuals possessed the abilities to design, use, and monitor a technique that they anticipated would be successful for a problem they encountered, as well as knowledge of which learning strategies were beneficial and which were not. Some implications for the growth of pre-service teachers' metacognitive awareness were highlighted in light of these findings.
6.	Devika and Singh (2019)	Influence of metacognitive awareness on engineering students' performance: a study of listening skills	The purpose of this research was to examine the effects of metacognition on engineering students' learning (listening skills), degrees of understanding (assumed and attained), learning of performance, and application of theoretical knowledge of listening skills. To assist the learners in becoming more conscious of and reflective of their learning, the study suggests a five-step AWARE concept of metacognition. Engineering students from India's BITS Pilani served as participants in the study, which employed the sequential sampling method. Engineering students believe they have a very high level and clarity of consciousness, yet the research contradicts this belief. There is a disconnect between theoretical understanding and real-world application.

			Understanding what they know, what they don't know, what they learn, and how they learn is made easier by metacognition. Engineering students would be able to use their listening skills in the learning factories to facilitate the sharing of information if they had a clear understanding of the learning process and how it works.
7.	Dhyani and Maikhuri (2018)	A study on the Metacognitive awareness of Primary School Students	One of the newer concepts in modern educational psychology is metacognition. The term "thinking about thinking" or "metacognition" refers to a higher level of one's own thought process. Metacognition is the study of cognition itself. An individual can understand and manage their cognitive execution with the aid of metacognition. It consists of two parts: The terms "knowledge of cognition" and "regulation of cognition" refer to activities that assist people regulate their thinking or learning, respectively. Metacognitive awareness refers to a person's awareness of their own thoughts, their way of thinking, and their problem-solving methods. Researchers examined the metacognitive awareness of elementary school kids in this paper. A person who develops these metacognitive skills will not only learn more effectively, but will also become a better problem-solver, planner, and thinker. Metacognitive talents, metacognitive experiences, metacognitive aptitude, metacognitive knowledge, high order thinking, and metamemory are just a few of the words used to describe metacognition.
8.	Jaleel, and Premachandran (2016)	A Study on the Metacognitive awareness of Secondary School Students	The authors of this study examined the secondary school pupils' metacognitive awareness. To assess secondary school students' metacognitive awareness, the researchers employed a standardised awareness inventory. According to their metacognitive awareness, the study sought to determine whether there are any appreciable differences between the various subsamples of Gender, Locality, and Type of Management of School. The investigators collect data using proper statistical methods, and then analyse the data.
9.	Gregory and Sperling (1994)	Assessing Metacognitive awareness	To understand the adults' metacognitive awareness, the authors created a 52-item inventory. Items were divided into eight subcomponents that fell under the two

			major categories of cognition knowledge and cognition control. The two-factor model was supported by two experiments. The factors were both interrelated (r =.54) and trustworthy (=0.90). According to Experiment 2, the knowledge of cognition component was unrelated to monitoring accuracy but was associated to pre-test assessments of monitoring ability and performance on a reading comprehension exam. Future research directions and implications for educational assessment were highlighted.

CONSCIENTIOUSNESS

S.NO.	AUTHOR/YEAR	TITLE	RESULTS
1.	Lindahl (2023)	Conscientiousness predicts doctoral students' research productivity	This study's goal was to investigate the connection between PhD students' research output and the personality attribute of conscientiousness. The data was collected from 1173 Swedish PhD students across the country. It was proposed that (1) conscientiousness predicts doctoral students' research output, and (2) conscientiousness predicts doctoral students' co-authorship with the supervisors. The findings confirmed hypotheses 1 and 2. The key findings were that doctoral students with higher conscientiousness collaborate with their advisors more often, are more productive while pursuing their degrees, and that the overall impact of conscientiousness is consistent across all study fields.
2.	Hu, Wang, and Fan (2022)	The Relationship between Conscientiousness and Well-Being among Chinese Undergraduate Students: A Cross-Lagged Study	The purpose of the study was to determine if conscientiousness and well-being (both subjective and physical well-being) among Chinese undergraduate students are inversely correlated. After adjusting for the effects of gender, age, body mass index, socioeconomic status, and the prior level of conscientiousness, the results showed that conscientiousness positively predicted subsequent levels of positive affect and life satisfaction while negatively predicted subsequent levels of negative affect and physical symptoms. Positive and negative emotions, life satisfaction, and medical symptoms, however, did not significantly influence the degrees of conscientiousness that would follow. According to this study, conscientiousness is a reliable and long-term predictor of both subjective and

			physical wellbeing. Conscientiousness and wellbeing do not necessarily go hand in hand, as evidenced by the current sample of Chinese undergraduate students.
3.	Verbree et al. (2022)	Conscientiousness as a Predictor of the Gender Gap in Academic Achievement	This study looked at how much conscientiousness can contribute to the achievement difference between men and women. Additionally, they looked at whether conscientiousness had a different role in explaining the gender gap for students from non-dominant versus dominant ethnic backgrounds. These results shed light on the factors driving the achievement disparity between men and women in postsecondary educational environments. According to the current study, male students may be at a disadvantage if conscientiousness criteria are used in university admissions processes. Instead, the application of such metrics may be a useful strategy for locating students who might benefit from interventions to raise their conscientiousness
4.	Wilmot and Ones (2019)	A century of research on conscientiousness at work	The most effective noncognitive predictor of professional achievement is conscientiousness (C). However, there are still unanswered concerns regarding how C relates to a wide range of occupational variables, what its defining traits and roles are in occupational settings, and whether or not its relationship to performance varies among occupations. To address these inquiries, 92 meta-analyses reporting relationships to 175 occupational factors were quantitatively reviewed. Results across factors show a significant mean effect of M=20. Then they combined 10 concepts that defined C in occupational settings. Finally, it was discovered that the performance effects of C are weaker in jobs with high complexity compared to those with low to moderate complexity.
5.	Wilmot (2019)	Conscientiousness is top personality predictor of positive career and work-related outcomes, has broad benefits	This study examined the relationship between conscientiousness and motivation for goal-directed performance, interpersonal responsibility for shared goals, organisational commitment, perseverance, and proficient job performance, as well as avoiding counterproductive, antisocial, and deviant behaviours. It found that the value of conscientiousness for job performance peaks when employees aim to accomplish conventional goals through persistence and work in predictable environments;

			however, it found no relationship between conscientiousness and job performance in general.
6.	Chen (2016)	Conscientiousness and everyday creativity among Chinese undergraduate students	In this study, 202 Chinese university students' conscientiousness and everyday creativity were compared. Personality and everyday creativity tests were given to research participants. According to structural equation modelling, conscientiousness has a moderate impact on ordinary creativity. Additionally, it demonstrated a favourable relationship between openness and extraversion and regular creativity. The present findings' implications are examined.
7.	Bogg and Roberts (2014)	The Case for Conscientiousness: Evidence and Implications for a Personality Trait Marker of Health and Longevity	Major funding organisations have recently prioritised personalised and translational approaches (such genetic testing) to health research and management. The researchers wanted to draw attention to a convergence of numerous lines of research that demonstrates relationships between the personality trait of conscientiousness and a variety of health-related outcomes. Such recommendations are reasonable and will probably create actual health advantages. They contend that the body of evidence favours more conscientiousness integration into epidemiological, medical, and public health research with the ultimate goal of comprehending how promoting more ideal trait standing might promote better health.
8.	Duckworth et al. (2012)	Who does well in life? Conscientious adults excel in both objective and subjective success	In this article, a representative sample of 9,646 American people was selected to examine how personality and cognitive ability connect to measures of objective success (income and wealth) and subjective success (life satisfaction, positive affect and lack of negative affect). Conscientiousness showed positive relationships of small-to-medium magnitude with all success outcomes in cross-sectional studies that controlled for demographic factors, cognitive ability, and other Big Five qualities. Other characteristics, in contrast, showed stronger but less consistently positive relationships with outcomes in the same models. Notably, individual variables other than conscientiousness explained more variance than conscientiousness in each of the five models predicting objective and subjective success outcomes. The advantages of conscientiousness may therefore be notable less for their ubiquity than for their magnitude

9.	Roberts et al. (2012)	What Is Conscientiousness and How Can It Be Assessed?	As per the review conducted, the personality trait of conscientiousness is a crucial factor in determining one's health, healthy ageing, and human capital. Although a significant amount of research has gone into understanding this crucial feature of personality, there are numerous conceptual and methodological problems that make understanding conscientiousness difficult. In order to achieve this, examine (a) the conceptual status of conscientiousness as a personality trait, (b) earlier studies that concentrated on the conscientiousness' underlying dimensions, (c) the nomological network in which conscientiousness is embedded, and (d) the various methods that have been employed to evaluate the conscientiousness' underlying dimensions. They conclude with suggestions for enhancing our comprehension of the conscientiousness construct, evaluation techniques, and its etiological foundations. Understanding conscientiousness and its fundamental contribution to the wellbeing of our society can play a significant part in the greater objective of this article.
10.	Conrad and Patry (2012)	Conscientiousness and Academic Performance: A Mediational Analysis	The current study builds on earlier researches by using a path analysis model to investigate potential proximal traits that may mediate this link in a sample of 223 undergraduate university students. The results of the study demonstrated the nuanced nature of the relationship between personality characteristics and academic achievement and suggest that personality may influence academic performance indirectly through more proximal variables.

SUBJECTIVE VITALITY

S.NO.	AUTHOR/YEAR	TITLE	RESULTS
1.	Mavilidi et al. (2020)	Effect of a Time-Efficient Physical Activity Intervention on Senior School Students' On-Task Behaviour and Subjective vitality: the 'Burn 2 Learn' Cluster Randomised Controlled Trial	This study sought to determine how senior school students' on-task behaviour and subjective vitality were affected by a time-effective physical exercise intervention. The comparison group was a wait-list control. Using a brief time sampling approach, on-task behaviour was evaluated at the baseline and post-test and reported as a percentage of instructional time. At the post-test, a validated questionnaire was used to gauge subjective vitality at the beginning and end of the class. These results show

			the potential academic gains via repurposing physical education time in senior school years.
2.	Uğur, Kaya and Özçelik (2019)	Subjective vitality Mediates the Relationship between Respect toward Partner and Subjective Happiness on Teachers	Positive psychological functioning has been linked to respect, subjective vitality, and subjective happiness. In this study, a teacher sample was used to evaluate subjective vitality as a mediator on the association between respect for the partner and subjective happiness. The research is a cross-sectional quantitative investigation of mediation. The data came from 172 married people. The results demonstrate that respect for the spouse and subjective vitality positively predict subjective happiness. Respect for the relationship strongly predicts subjective liveliness. Additionally, subjective vitality serves as a partial mediating factor in the link between respect for one's partner and subjective happiness. Understanding how respect functions in close relationships can help with the creation of interventions that improve partner communication about safety attitudes and reduce partner violence.
3.	Singh and Sharma(2018)	Subjective vitality as a predictor of psychological Well-being	Researches has found that Subjective vitality represented key determinants of psychological well-being. Subjective vitality is the conscious feeling of positive energy, aliveness and spirit, thus felling of subjective vitality is positively related to psychological well-being. The current study further scrutinized the potential association between, Subjective vitality and psychological well-being. The sample consisted of 100 young adults (age 20-40 years; mix gender). In present investigation subjective vitality scale (Ryan & Frederick, 1997) and psychological well-being scale (Ryff & Keyes, 1995) were administered on participants in individual or in group settings. Statistical analyses demonstrated that Subjective vitality positively associates with psychological well-being and its positive constructs or various sub dimensions. Results suggest that people with higher level of vitality also experienced higher level of psychological well-being. These findings are relevant for topical scientific debates regarding the underlying mechanisms of

			psychological well-being through the subjective vitality.
4.	Xie, Guan, and Boyns (2018)	Use of a Student Recreation Center, Self Determination Needs Satisfaction, and Subjective vitality: A Structural Model	The student recreation centre (SRC) encourages college students to have fulfilling lives. This study, which was based on self-determination theory, used a sample of 540 students from a big state institution in the United States to investigate the connection between SRC use and subjective vitality. The usage of exercise and group sport facilities had a positive association with subjective vitality, according to the results of structural equation modelling, which were mediated by competence need satisfaction, relatedness need satisfaction, and sense of physical health.
5.	Ju (2017)	The relationship between physical activity, meaning in life, and subjective vitality in community-dwelling older adults	The association between physical activity and subjective vitality in older persons was the focus of the current study, which also looked at the potential role of purpose in life. The instruments measuring physical activity, purpose in life, and subjective vitality were completed by 250 community-dwelling elders. According to the findings of structural equation modelling, physical activity was linked favourably to both subjective vitality and purpose in life. Further, meaning in life was a mediator in the link between physical activity and vitality. The recent study revealed that it is more effective to focus on purpose in life as well as physical activity in order to vitalize elderly, even though earlier studies have consistently demonstrated a positive relationship between physical activity and vitality. Additionally, focusing on the meaning of life might be a fruitful method to keep older persons who are unable to engage in regular physical activity vital.
6.	Sariçam (2016)	Examining the Relationship between Self rumination and Happiness: The Mediating and Moderating Role of Subjective vitality	Examining how subjective vitality influences the link between rumination and subjective happiness was the main goal of this study. There were 420 university students who took part. The Subjective vitality Scale, the Self-rumination Scale-SRS, and the Short Form of the Oxford Happiness Questionnaire were employed in this study. Using correlation analysis and hierarchical regression analysis, the connections between rumination, subjective vitality, and happiness were

			investigated. In a correlation analysis, it was discovered that self-rumination was inversely correlated with happiness and subjective vitality. Contrarily, happiness and subjective vitality had a positive relationship. Rumination can contribute to unhappiness, according to a hierarchical regression study that found that it lowers subjective vitality in unhappy people while increasing makes people happier.
7.	Rouse et al. (2015)	Measuring the positive psychological well-being of people with rheumatoid arthritis: a cross-sectional validation of the subjective vitality scale	This study intends to validate an outcome measure of positive psychological well-being for RA patients that are therapeutically meaningful. The Subjective vitality Scale (SVS)'s factorial validity and reliability were studied in the first study, and the instruments' convergent validity was tested in study 2. Being a valid and reliable indicator of RA patients' positive psychological well-being, researchers and healthcare professionals can use this clinically applicable, freely available, and quick assessment tool.
8.	Dubreuil, Forest and Courcy (2014)	From strengths use to work performance: The role of harmonious passion, subjective vitality, and concentration	The aim of this study was to confirm the relationship between using one's strengths and one's job performance and, secondly, to evaluate theoretical models of using one's strengths by examining a pathway from using one's strengths to one's work performance via harmonious passion, subjective vitality, and concentration. In order to test the suggested hypothesis, structural equation modelling analyses were done on a sample of 404 French-speaking Canadian workers. Results indicate a link between utilising one's strengths and job performance. Additionally, the hypothesised variables entirely moderate this association.
9.	Uysal et al. (2014)	Subjective vitality as Mediator and Moderator of the Relationship between Life Satisfaction and Subjective Happiness	The association between life satisfaction and subjective happiness was examined in this study, as well as the mediator and moderator effects of subjective vitality. The Subjective vitality Scale, the Satisfaction with Life Scale, and the Subjective Happiness Scale were all completed by 378 university students as part of the study. According to the findings of hierarchical regression analysis, the connection between life satisfaction and subjective happiness is largely mediated by subjective vitality.

			Subjective vitality did not operate as a moderator in the link between subjective happiness and life satisfaction, according to a hierarchical regression analysis.
10.	Uysal, Satici, and Akin (2013)	Mediating Effect of Facebook® Addiction on the Relationship between Subjective vitality and Subjective Happiness	The mediating effects of Facebook addiction on the link between subjective vitality and subjective happiness were investigated in this study. The Facebook Addiction Scale, the Subjective vitality Scale, and the Subjective Happiness Scale were given to 297 university students (157 women, 140 males; M age = 20.1 yr., SD = 1.3). The association between subjective vitality and subjective happiness was somewhat mediated, according to a hierarchical regression analysis of Facebook addiction.
11.	Akın (2012)	The Relationships Between Internet Addiction, Subjective vitality, and Subjective Happiness	Examining the relationship between Internet addiction, subjective vitality, and subjective happiness was the goal of the study. 328 college students who participated in the study completed a set of questionnaires that included the Subjective vitality Scale, the Subjective Happiness Scale, and the Online Cognition Scale. The findings showed that Internet addiction negatively predicted subjective vitality and happiness. Contrarily, subjective vitality positively predicted subjective happiness. Additionally, the link between Internet addiction and subjective happiness was mediated by subjective vitality.
12.	Fini et al. (2010)	Subjective vitality and its anticipating variables on students	This study examined the characteristics that would affect students' subjective vitality. 338 first-year Azad University of Bandar Abbas students were chosen at random. The findings indicated a somewhat strong positive association between subjective vitality and life skills, self-efficacy, university adjustment, life satisfaction, and psychological well-being. According to regression analysis, the top predictors of subjective vitality are, in order, psychological well-being, life skills, and life satisfaction. These variables represent a variance of /347. The findings coincided with those of other studies.

JUSTIFICATION OF THE PROBLEM

The study of human well-being and subjective vitality has gained significant attention in recent years. Subjective vitality refers to individuals' subjective perception of feeling alive, energetic, and full of enthusiasm. Higher subjective vitality has been associated with enhanced psychological and physical health, increased engagement in activities, and improved overall life satisfaction.

Another emerging field of eco-spirituality has highlighted the importance of individuals' connection with nature and their sense of responsibility towards the environmental preservation thus, providing individuals with a sense of purpose, belongingness, and interconnectedness with the natural world. By fostering eco-spirituality individuals can cultivate a deeper connection with nature, leading to a more harmonious relationship with the environment and contributing to a healthier, more sustainable future. Further, metacognitive awareness is an individuals' ability to reflect upon and monitor their thoughts, feelings, and cognitive processes. It plays a crucial role in self-regulation, decision-making, and overall psychological well-being and individuals. Therefore, with higher levels of metacognitive awareness one may experience greater subjective vitality. Additionally, Conscientiousness refers to the tendency to be organized, responsible, and self-disciplined and goal-directed behaviours.

Education is considered to be the most powerful instrument for bringing about the desired changes in the society. It is expected that by imparting quality education, it will enrich and conserve the country's traditional culture and initiate healthy social change as per the demands of the time. Investigator proposes to select the sample from Dayalbagh Educational Institute (DEI), Deemed to be University, Dayalbagh, Agra, which is cradled in a lush green environment. DEI's Institute-wide compulsory core courses at undergraduate level provide students with invaluable exposure and the opportunity to interact with surrounding social, ecological and economic systems. The Institute run ccompulsory core courses for all UG students viz., Rural Development, Agriculture Operations, Social Service, Comparative Study of Religion, Scientific Methodology, General Knowledge and Current Affairs, Cultural Education, Co-curricular Activities, Disaster Management, and Environmental Studies.

The investigator could not find any research on the above three variables in relation to subjective vitality of students. Therefore, the proposed research on the relationships between eco-spirituality, metacognitive awareness, and conscientiousness with subjective vitality among undergraduate students,

holds immense potential for both theoretical and practical implications. The study will ultimately aid in the development of targeted interventions and policies to promote eco-friendly attitudes, sustainable practices and behaviours in students, thereby contributing immensely towards individual and societal levels.

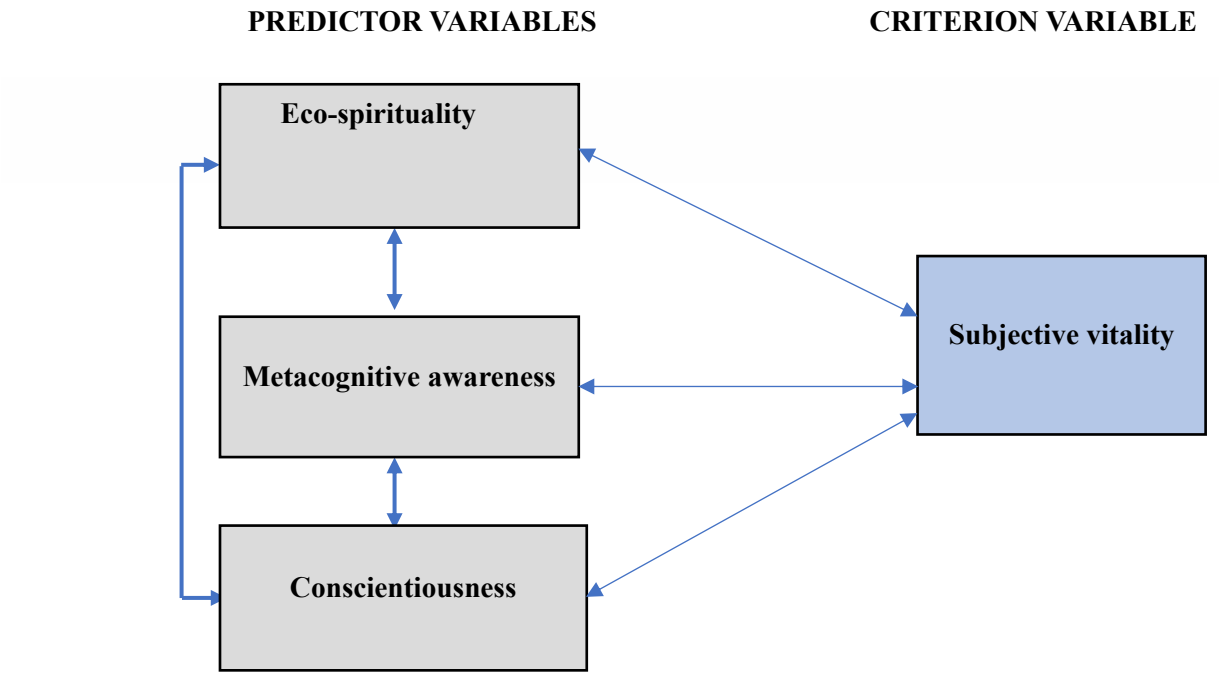

Figure1: Conceptual Framework

The Conceptual framework in Figure 1 is showing the relationship of Eco-spirituality, Meta cognitive awareness and Conscientiousness with subjective vitality.

METHOD

AIM: The aim of the present research is to investigate the relationship between Eco-spirituality, Metacognitive awareness, and Conscientiousness as predictors of Subjective vitality among DEI university students.

OPERATIONAL DEFINITION OF THE TERMS USED

Eco-spirituality: Eco-spirituality refers to a person's awareness pertaining to a relational view between human beings and the planet.

Metacognitive awareness: Metacognition is the awareness of one's thinking and the strategies one is using. It enables oneself to be more mindful of what they are doing why and how the skills they are learning might be used differently in different situations.

Conscientiousness: Conscientiousness is the personality trait of being careful or diligent, to possess a

desire to do a task well, efficiently and in an organized manner.

Subjective vitality: The concept of subjective vitality refers to the state of feeling alive and alert; having energy available to the self. Vitality is considered an aspect as being vital and energetic as part of what it means to be fully functioning and psychologically well.

OBJECTIVES

- To study the relationship of Eco-spirituality, Metacognitive awareness and Conscientiousness with Subjective vitality, respectively.
- To study the relationship of Eco-spirituality and Metacognitive awareness.
- To study the relationship of Eco-spirituality and Conscientiousness.
- To study the relationship of Metacognitive awareness and Conscientiousness.
- To study the relative contribution of Eco-spirituality, Metacognitive awareness and Conscientiousness with Subjective vitality, respectively.

HYPOTHESES

- There would be a positive relationship between Eco-spirituality, Metacognitive awareness and Conscientiousness with Subjective vitality, respectively.
- There would be a positive relationship between Eco--spirituality and Metacognitive awareness.
- There would be a positive relationship between Eco-spirituality and Conscientiousness.
- There would be a positive relationship between Metacognitive awareness and Conscientiousness.
- Eco-spirituality, Metacognitive awareness and Conscientiousness would have significant contribution in the determination of Subjective vitality, respectively.

VARIABLES

Predictor Variables

- Eco-spirituality
- Metacognitive awareness
- Conscientiousness

Criterion Variable

- Subjective vitality

Relevant Variables

- Educational Qualification- University students would be selected for the sample
- Age- Between 17 to 25 years
- Gender- Both Boys and Girls would be included in the sample

SAMPLE

A sample of about 400 undergraduate students (both boys and girls) between the age range of 17 to 25 years would be selected from eight Faculties of Dayalbagh Educational Institute (DEI), Deemed to be University, Dayalbagh, Agra, UP, India, using stratified random sampling technique, in which out of the total population of students from all 8 Faculties: proportion would be calculated, then on the basis of the ratio of the gender number of students will be decided from each Faculty.

TOOLS:

- **Eco-spirituality: '**Eco-spirituality: A Scale to Measure an Individual's Reverential Respect for the Environment' developed by Suganthi (2019) will be used. This scale contains total 20 items with the different five dimensions i.e., Dwelling, Caring, Revering, Experiencing, and Relating. It is 7-point Likert scale, ranging from 1 as strongly disagree to 7 as strongly agree. Reliability was checked using Cronbach's alpha and McDonald's omega (Revelle & Zinbarg, 2009) for eco-spirituality which is 0.923 and 0.97. The reliability of the questionnaire was 0.843. The convergent and discriminant validity was determined to be 0.807.
- **Metacognitive awareness:** Metacognitive awareness Inventory (MAI) developed by Schraw and Dennison (1994) will be used. It is a "True or False" type scale. The MAI consisted of 52 items in total, and two major dimensions i.e., knowledge of cognition and regulation of cognition. Some other dimensions of the inventory are declarative knowledge, procedural knowledge, conditional knowledge, information management strategy, comprehension monitoring, debugging strategies, and evaluation. Higher scores correspond to greater metacognitive regulation. The Cronbach's alpha reliability coefficient was established for overall metacognitive awareness and reliability coefficient for Metacognitive awareness found to be 0.962. Convergent validity was calculated. The researcher checked the scale for its relevance and validity.

- **Conscientiousness:** (HEXACO-PI-R) developed by Ashton and Lee (2009) will be used to measure Conscientiousness. HEXACO 60 Personality Inventory measures six dimensions of personality including Honesty Humility, Emotionality, Extraversion, Agreeableness, Conscientiousness and Openness to Experience. The scale has high internal consistency reliabilities for each scale and convergent validity. For the present research, the investigator will only use the Conscientiousness dimension constituting 10 items measuring four facets of Conscientiousness, viz., Organization, Diligence, perfectionism and Prudence. Each item alternative is assigned a weightage ranging from 1 as strongly disagree to 5 as strongly agree. Internal Consistency of the HEXACO-PI for Conscientiousness (Coefficient alpha) was calculated to be 0.89. Also, the high convergent validity for the subscale Conscientiousness was found to be r = 0.83.
- **Subjective vitality:** Subjective vitality scale (SVS) developed by Ryan and Frederick (1997) will be used. This scale consists of seven items that has been scored in a seven level Likert range. A total score can range from 7 to 49; a higher score indicates more subjective vitality. Internal consistency coefficient was found to be as 0.84 for the scale. Moreover, test- retest reliability coefficient was 0.79 and Cronbach alpha internal consistency coefficient was found as 0.87 for this scale (Sariçam, 2016).

PROCEDURE

For the purpose to study the relationship between Eco-spirituality, Metacognitive awareness and Conscientiousness as predictors of Subjective vitality, approximately 400 undergraduate students (both boys and girls) belonging to an age range of 17 to 25 years would be selected through stratified random sampling technique from the Faculties of Dayalbagh Educational Institute, deemed to be University, Dayalbagh, Agra.

After obtaining official permission from the concerned authorities, written consent from the respondents selected to take part in the research will be obtained. The four psychological scales will be then administered to measure Eco-spirituality, Metacognitive awareness, Conscientiousness and Subjective vitality. The data will be then statistically treated with the help of Multiple regression analysis.

DESIGN: Correlation Design would be used.

STATISTICAL ANALYSIS: Multiple regression analysis would be used to statistically treat the data.

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